

Allowed  
Claims  
or  
08/05/06

PATENT

Application No.: 09/767,597  
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APPENDIX B  
PENDING CLAIMS SUBJECT TO EXAMINATION

13. An isolated polypeptide comprising an alpha subunit of a cation channel, the polypeptide:

- (i) forming, with at least one additional HAC alpha subunit, a cation channel having the characteristic of activation upon hyperpolarization; and
- (ii) having an amino acid sequence that has greater than about 96% identity to SEQ ID NO:1.

15. The isolated polypeptide of claim 13, wherein the polypeptide has an amino acid sequence of SEQ ID NO:1.

16. The isolated polypeptide of claim 13, wherein the polypeptide comprises an alpha subunit of a homomeric cation channel.

17. The isolated polypeptide of claim 13, wherein the polypeptide comprises an alpha subunit of a heteromeric cation channel.

18. The isolated polypeptide of claim 13, wherein the polypeptide has a molecular weight between about 85 kDa to about 94 kDa.